

Response and Remarks

Prior to this amendment, Claims 1-4, 6-24, 26-30, 34-67, 71, and 74-75 were pending in this case, with claims 5, 25, 31-33, 68-70, and 72-73 previously cancelled at the instruction of the Examiner. The Applicant requests that the Examiner enter all amendments and find that all claims are now allowable as written.

The Applicant had a recent interview with the Examiner and presents the following summary:

Summary of Interview with Examiner

On November 19, 2004, an in-person interview (the "Interview") was conducted between the Examiner and the Applicant. The Applicant thanks the Examiner for her time and helpful suggestions. The Applicant accepts the Examiner's summary of the Interview, adding the following comments with additional detail:

The Examiner asked the Applicant to submit an informal amendment to include the application number of the cross reference to this Application. This is done above.

The Applicant showed the Examiner amendments to the claims to resolve the Section 112 rejections. The Examiner agreed that these amendments resolve all Section 112 rejections. In addition, the Applicant explained the meaning of "resolving ties" in claim 15 to resolve the Section 112 objection for that claim, showing how the meaning is explained on page 14, lines 13-20 of the original Application. In addition, the Applicant showed how figures 1 and 2 give an example of resolving ties by using multi-level sorting. For example, fig. 1, element 101 shows that one can sort first by court hierarchy and then resolve ties among records from the same court by sorting by date. If there are further ties, search relevance is used to break the ties.

Next, the Examiner and Applicant discussed the Section 103 rejections. The Examiner agreed that the “bibliographic elements” of Barr do not qualify as “content elements,” as such term is used in claims 1, 21, and other claims of the Application. She agreed that “content element” could mean the internal text of a document, for example, but would not mean the title or date of a document. She said that the rejection was based instead on the following reasoning: Barr shows that it is possible to display content elements after the user selects a record from a search result to display. The Examiner cited figure 4B as showing that a search and retrieval system could show content elements once a user selects a search result to display by clicking on it. The Examiner then said Jones was cited for the proposition that a display could have two simultaneous panels. The Examiner asserted that combining the possibility of displaying content elements after a record is selected in Barr with two display panels in Jones, one would obtain the claimed invention.

The Applicant disagreed with the above conclusion, asserting that more would be needed for one skilled in the art to understand that identifiers and content elements should be combined in the display of a search result. First, the Applicant noted that Barr never discloses displaying content elements on the search results screen. Barr just reinforces the prior art notion that content elements should not be displayed until the user selects a record for display. Secondly, Jones reinforces this notion as well, only displaying a “preview” image of a page of a document until the user selects a document to display – only then is the text displayed. Finally, Jones does not deal with the display of search results, so it could not lead one skilled in the art to change the way search results were commonly displayed. Jones deals with ways to view and navigate a document, teaching that images should be included with text so that users do not lose important editorial information. Jones does not teach how to display search results. No final agreement

was reached between the Examiner and the Applicant regarding this rejection of claim 1 of the Application.

Next, the Examiner and Applicant discussed a number of dependent claims. It was noted that with the resolution of the Section 112 rejection, the Examiner would be able to consider the dependent claims more closely. Indeed, the Examiner said she thought the Applicant's interface shown in fig. 1 had a number of novel features that could be claimed. She noted that the figures show legal-specific examples, so that the claims could be, if desired, narrowed further to searches over legal materials without adding new matter. The Applicant raised a number of such claims currently in the application that were both novel and commercially important, including claims 3 and 11 that limit the invention to the use of legal citations as identifiers, claim 15 dealing with resolving ties in sorting, claims 50 and 51 that deal with replacing one content element with another, and claims 58-61 that involve resorting search results.

Discussion of Amendments and the Section 112 Rejections

The Examiner rejects claims 2, 6, 7, 22, 23, 26, and 34 (and claims 8-15, 27-30, 58, 59, and 71 based on dependency) under Section 112, asserting that the limitation "said responsive records" is vague and lacks proper antecedent basis. Claims 2, 6, and 7 depend from claim 1, which includes the phrase "records responsive to a database query." "Responsive records" is merely intended to mean "records responsive to a database query." Similarly, claim 21 includes the phrase "records responsive to a database query." Claims 22, 23, 26, and 34 use the language "responsive records" to mean the same thing. For clarity, claims 2, 6, 7, 22, 23, 26, and 34 are amended to replace "responsive records" with "records responsive to a database query." Since this is merely a semantic change that in no way changes the substantive content of the amended claims, no new matter is introduced.

The Examiner rejects claim 16 (and claims 17-20 based on dependency) as vague, noting in her response to the Applicant's arguments that they lack proper antecedent basis. Similarly, claims 40 and 45 (and claims 41-44 and 46-49 based on dependency) are rejected for lack of proper antecedent basis. Claim 16 is amended for additional clarity as above, replacing "responsive records" with "records responsive to a database query." For consistency, claim 40 which is the apparatus analog of claim 16, is amended to replace "records contained in said list of responsive records" with "records responsive to a database query." Claim 45 is amended similarly for clarity and consistency. Again, these semantic changes do not introduce new matter.

Claims 58, 59, and 71, like the prior claims, contain the phrase "responsive records"; the phrase is amended as above to read "records responsive to a database query" to provide proper antecedent basis. Similarly, claim 4, although herein withdrawn, is amended to provide proper antecedent basis, replacing "records" with "records responsive to a database query." Again, these semantic changes do not introduce new matter.

Claim 7 is also amended to clarify that the citations intended are legal citations and that the records are legal documents. Legal documents and their citations are discussed in the original Application on page 9, lines 11-15 as a preferred embodiment, so no new matter is added.

The Examiner states that "resolving ties" is vague in claim 15 and requests a citation to provide support for the limitation in the disclosure. The original Application explains that a user can sort by one criteria and then break ties using second- and third-order sorting. Page 14, lines 13-20. An example is provided in the Application for further clarity, showing how the first level of sorting can be by court hierarchy, the second level can be by date, and the third can be by

relevance. Page 14, lines 14-16. This means that two cases from the same court (i.e., that are “tied” with the first criteria) can be ordered by the second criteria, namely date. Two cases that are also “tied” because they are from the same court and have the same date can be sorted by relevance. The lower-level sort breaks the ties of the higher-level sort. Such multi-level sorting is shown in Fig. 1 element 101 and fig. 2 element 205 of the original Application.

The other Section 112 rejections by Examiner were due solely to dependency on the amended claims that were just discussed. Thus, their Section 112 rejections must be overcome by overcoming the rejections to the claims from which they depend.

As noted by the Examiner in the summary of the Interview, these amendments overcome the Section 112 rejections. The Applicant respectfully requests that all Section 112 rejections be withdrawn.

Discussion of the Section 103 rejection

The Examiner rejects claims 1-4, 6-15, 21-24, 26-30, 34-39, 50-67, 71 and 74-75 as unpatentable over Barr et al. US Patent 5,873,076 in view of Jones et al. US Patent 6,415,307B2. The Applicant respectfully traverses the rejection.

In the written Office Action, the Examiner cites various portions of Barr and Jones, asserting that they show each element of the claimed invention. As discussed below, an examination of the cited portions of the patent fail to show a number of elements of the claims. Furthermore, Barr and Jones teach away from the claimed invention, each teaching that the text of a file should be shown *after* the file is selected by the user. Barr col. 14, line 66 to col. 15, line 16, Jones col. 12, lines 11-14.

During the Interview summarized above, the Examiner described the Section 103 rejection simply resulting from Barr teaching that content elements can be displayed (after the

user selects a result) along with Jones teaching that one can have a simultaneous display. As described below, this is not adequate for a rejection of the claimed invention, because neither patent explains why the common prior art display of search results containing only identifiers should be modified to include the simultaneous display of content elements.

The Applicant's arguments can be summarized as follows:

1. Barr – cited by the Examiner -- teaches a way to query a database and display search results including the simultaneous display of identifiers and secondary bibliographic information. However, it does not teach the display of any element of the actual work that is identified as part of the results display.
2. Jones – cited by the Examiner -- teaches the simultaneous display of information about a publication, such as a table of contents, along with an image of a portion of the publication (see fig. 2). Jones does not deal with search queries or how to display the results of a query.
3. 1 & 2 above show that Barr and Jones, whether consider together or apart, cannot teach modifying the prior art technique of only showing identifiers with search results to include the simultaneous display of content elements.
4. Barr and Jones teach away from the claimed invention, each teaching that the text of a file should be shown *after* the file is selected by the user.
5. A detailed examination of the portions of Barr and Jones show that certain claimed elements are missing from both patents, so that even combined, they cannot support an obviousness rejection.
6. Barr and Jones do not contain suggestions that they should be combined, so they should not be combined to support an obviousness rejection.

7. The dependent claims in the Application contain many additional elements and limitations not found in Barr or Jones. As a result, these claims are patentable, even if claims 1 and 21 are not. The Examiner's treatment of these claims is discussed below. The Applicant notes that the novel elements and limitations include, but are not limited to:

- a. Displays that involve legal materials and legal citations, such as in claims 3, 7, 9 - 14
- b. Resolving ties among records when sorting them, as in claim 15
- c. Replacing one content element with another as in claims 50 and 51
- d. Multiple-panel displays as in claims 56 and 57.
- e. Resorting search results, as in claims 58-61.

Appendix: A detailed discussion of each point made by the Examiner

In order to satisfy the requirement that the Applicant respond to each and every claim of the Examiner, the following detailed discussion is presented:

A. For claim 1

Two patents cannot support an obviousness rejection if they do not together contain all of the elements of the claims rejected. The portions of the patents cited by the Examiner do not contain all the claimed elements. The Examiner lays out some of the elements of claim 1 along with sections in Barr and Jones that are said to teach those elements. The Applicant respectfully asserts that many of the indicated sections fail to adequately disclose the elements at issue. Most critically, Barr does not teach the display of any content element in a results display. Query server 116, fig. 3 of Barr does not show records characterized by having identifiers and content elements. The query server is simply the search engine that returns results of a search. The

query server receives a search query and yields results information. Col. 8, lines 65-67. It is further described in col. 10, lines 46-64. Element 204 of fig. 2 states that “system searches database index and returns a list of items that match.” There is no mention of identifiers or content elements. Col. 9, lines 41-43 describing this element similarly contains no mention of content elements. Col. 14, lines 29-51, cited by the Examiner, describes the display of search results, including many possible elements such as relevance scores and bibliographic information corresponding to each document. However, no mention is made of displaying content elements. In other words, a variety of information is given about each document, for example bibliographic information about it, its relevance score, and an indication whether the document is a text file or a multi-media file, but no part of the actual document is displayed. Thus, the limitation “displaying simultaneously content elements of at least one of the records” is missing, not only because the proper simultaneous display is missing, but the content elements are missing altogether.

The other portions of Barr cited by the Examiner support the conclusion that content elements are not displayed. Element 206 of figure 2 says “user chooses one of the matching items from the list.” It does not address the composition of the display. Figure 4A shows a display with many elements, including “relevance scores 342, bibliographical information 343, readability information 343a, size information 343b, ad a file type indicator 344 (for indicating whether the document file corresponds to a textual document or a multi-media file). Col 14, lines 41-47. Noticeably absent from the description of the display in col. 14, lines 29-65 is any mention of displaying a content element. Figure 5 portrays data structures for storing document information, but does not address the display of search results. See col. 7 lines 58-61. Finally,

col. 12 lines 48-57 discusses how to do a query, but does not address the display of the results of that query.

In the Examiner's response to the Applicant's arguments, she states that "Barr teaches a display of a list and bibliographical information (i.e., content)." The Applicant disagrees that "bibliographical information" in Barr is part of the content of a document or record. The original Application explained that identifying information could include a record's title, source, date, and relevance score. Page 15, col. 10-14. These identifiers are what Barr calls "bibliographic information." Col. 14, lines 17-28. At the Interview described above, the Examiner agreed that bibliographic information as described in Barr did not read on "content elements" in the present claims. The Examiner agreed that an example of a content element is the internal text of a document and this would not be considered bibliographic information.

The Examiner states that Barr "teaches simultaneously identifying document records with a single search query." The Applicant clarifies that Barr teaches a "single search query to simultaneously identify document records and multi-media records related to the single search query." Col. 4, lines 11-14. Again, there is no disclosure of the display of content elements.

The Examiner recognizes that Barr does not read on the claimed invention and that it must be considered in light of Jones, which is said by the Examiner to teach "a user interface with a retrieval result display unit for simultaneous display of results of a database query." As shown below, Jones teaches a way to display and navigate a publication, as well as a way to display a story that is selected by a user, but it does not teach a "simultaneous display of results of a database query." With this element missing, Barr and Jones together cannot make the claimed invention obvious.

Furthermore, since there is no search query in Jones, there can be no search results.¹ This means that there is no concept of identifiers to search results to be shown simultaneously with content elements. Finally, as discussed below, Jones teaches the simultaneous display of a table of contents for a publication or a list of companies mentioned along with an image of the publication, but not the actual content elements.

As explained in the Abstract of Jones and the Summary of the Invention, Jones teaches a means for displaying and navigating a printed publication, such as a newspaper, rather than a means of displaying the results of a search query. It allows a user to see the image of a page where a story is found, so that one can get visual cues about the story. For example, one can see the editorial importance that was attached to a story. Col. 2 lines 18-24. The invention also provides an advanced way to navigate through a publication. As shown in fig. 2, it will simultaneously display a contents list for the publication along with an image preview. If the user wants to see the actual text of a story (a content element), she must click on the story area of the page or on a keyword extracted from the text. Abstract, Col. 6, lines 43-45. This is akin to the standard public domain situation in which one must click on a search result to get a display of the content of that result. Once the desired story is selected from the preview image, the full text of the story is displayed, along with the image of the page from which the story is taken. Fig. 3 provides such an illustration of Jones' means of document display.

The portions of Jones cited by the Examiner confirm this conclusion and show that what is disclosed is a way to page through images of a publication, not a way to display search results.

¹ Jones notes that one could consider making the publications searchable in an extension of the invention. See col. 16 line 63 – col. 17, line 7. However, Jones then says that the prioritization of stories by importance and keyword lists could then be used to assist with high quality searching with high efficiency. No mention is made of using (continued...)

Figure 2, as described in col. 6 lines 20-50, provides a simultaneous display of an image of a page and a list of contents. One can go to the image of the next or previous page of the publication, so we see that this is a means of displaying a publication, not a means of showing a search result. One can click on the contents displayed to navigate through the publication. To see an actual article in the publication, one must click on it. Col. 6, lines 43-45. Doing this changes the display to simultaneously show the image of the document and the text of the article. Col. 6, lines 46-50. We see that Jones is teaching a way to display a publication, not a way to display the results of a database query. As seen in figure 10, keywords can be extracted from the publication and used to navigate the text of the publication. Col. 4, lines 21-23, col. 14, lines 56-58, claim 14 (“using said keyword list as display navigation data.”), col. 51, line 4. However, these are pre-determined keywords that are determined in advance to be important. For example, claim 4 claims a method of finding “predetermined keywords.” The user is not invited to do full-text searching to find documents. The goal is to allow the user to navigate the text of a document using keywords, not to search a database of documents.

The above shows that Barr and Jones lack key elements of the claimed invention. For example, Jones does not teach the simultaneous display of the results of a database query. In addition, the Applicant traverses the conclusion that one skilled in the art would have combined these patents. The Examiner claims that one would combine the patents because of “Jones et al’s ability to simultaneously display a list of items and there content.” However, Jones does not do this. Jones displays a table of contents for a publication and its image. Fig. 2. However, it does not display a list of different publications and their content. Furthermore, the goal is not to

advanced displays. This passage also is an admission by Jones that the invention taught is not a display of results of a database query. One skilled in the art would not think to read Jones to find enhanced displays for such queries.

improve the “viewing of the retrieval result” since Jones deals with displaying publications, not retrieval results. Thus, the patents should not be combined and they cannot prove the claimed invention obvious.

Barr and Jones also should not be combined because they do not contain a teaching or suggestion that they be combined. As stated by the Court of Appeals for the Federal Circuit, “[o]bviousness cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching or suggestion supporting the combination. Under Section 103, teachings of references can be combined only if there is some suggestion or incentive to do so.” In re Fritch, 972 F.2d 1260, 1266 (Fed.Cir.1992). Jones teaches a computerized information display that allows the user to view an article in a publication along with additional editorial information that is provided by seeing an image of the full publication. See abstract, col. 2, lines 8-24. It does not teach a means of displaying search results. Barr, in contrast, teaches a means of searching a database containing both text and multimedia files and a means of displaying search results with a mixture of text and multimedia files. Abstract, fig. 4A. Neither patent suggests the other.

B. All claims other than Claim 1

Claims 16-20 and 40-49 have been found by the Examiner to be substantively allowable and need not be discussed further.

The above arguments show that claim 1 is non-obvious. As a result, claims 2-4 and 6-15 that depend from it must be too. Similarly, the apparatus claims 21-24 and 26-39 would also be patentable. Even if claims 1 and 21 were found unpatentable, the dependent claims introduce novel limitations that would make these claims patentable. The Examiner addresses some of the

limitations of these claims, claiming that Barr teaches the limitations. The Applicant respectfully disagrees.

Claim 2 adds that the displayed content element comprises the entirety of one of the records responsive to the search query. The Examiner cites Barr, figures 4A and 5. As discussed above, figure 4A does not display content elements, of either part or all of a record, and figure 5 portrays data structures for storing document information, but does not address the display of search results. Neither figure contains the limitation that the displayed content element be an entire document.

Claim 3 requires that the identifier be a case citation. The Examiner cites figures 4A and 5. The identifiers in fig. 4A are titles and authors. There are no cases involved and no citations. An example of a case citation is 358 S.W.2d 289. Nothing close to this is found in Fig. 4A. Figure 5 shows data structures for storing a document directory table, a dependent image table, and publisher information table. Col. 7, lines 58-61. There are no search results and no identifiers of any kind.

In light of the Examiner's decision that claims 16-20 and 40-49 are allowable, the Applicant does not believe that Claim 4 remains commercially necessary, so it is being withdrawn. In order to have a complete record, the Applicant notes that Barr does not read on this claim. The Examiner cites element 206 of figure 2 and figure 4A. Figure 4A contains some information about each record, such as whether it is a text or multi-media file, the size of the file, the publication date, relevance, and readability information. However, there is no indication of whether any of the records had been displayed before. Element 206 of figure 2 says the user chooses a matching item from the list of items that match her query. However, there is no indication that records previously displayed in a prior query will be identified or marked in any

way. The Examiner agreed that this rejection (which also appeared in the Examiner's office action of November 26, 2003) was overcome in her Interview with the Applicant on January 14, 2004. However, in light of the withdrawal, the claim need not be considered further at this time.

Claim 6 adds the step of sorting the responsive records. Col. 13, lines 30-67, cited by the Examiner, does discuss performing a relevance ranking. However, there is no mention of displaying a content element along with identifiers, so the claim remains patentable as long as claim 1 is patentable. Claim 8, which adds the step of computing the relevance of said responsive records (apparently mislabeled as claim 7 in the office action) is similarly patentable as long as claim 1 is patentable.

Claim 7 (apparently mislabeled as claim 8 in the office action) demanded that the responsive records include a record name, a record citation, a record date, and a record author. This claim has been amended to clarify that a legal citation is intended. Figure 5, element 400, makes no mention of legal citations.

Claim 15 adds the limitation of resolving ties in a preceding sort. Col. 13, lines 30-67 discusses how to compute relevance in order to perform a relevance ranking. However, it does not consider the case where two or more documents have the same relevance and it does not indicate how the tie would be broken – i.e., how documents with the same relevance would be sorted. Hence, this claim would be patentable even if claim 1 were not.

Claims 9-14 depend from claim 7 which deals with legal documents that are not addressed by Barr. Claim 9 involves computing the relevance of legal documents, again not addressed by Barr. Claims 10 through 14 claim various ways of sorting the documents. The Examiner cites figure 5 which illustrates preferred data structures, but does not address sorting.

The Examiner rejects claims 21-24 and 26-39² because she says they parallel claims 1-4 and 6-15. The above shows why the latter claims should not be rejected, so neither should claims 21-24 and 26-39. Furthermore, many of these claims add additional novel limitations. For example, claims 27-30 and 39 involve sorting records responsive to a database query by various algorithms.

Claims 50-55, 58-59, 62-67, 71, and 74-75 contain a myriad of new elements and limitations that are not found in the previously discussed claims. For example, claims 50 and 51 claim not just showing a content element, but also replacing a displayed content element with another element. The option to change content elements is an important commercial feature of the Applicant's service. Claims 52 and 53 involve showing a specific content element, the first paragraph of a given record. The first paragraph of a record is important because it often contains a summary of the record. Claims 58 and 59 involve the ability to resort a list of records responsive to a database query. Barr has a brief discussion of sorting in col. 13, lines 30-67, but there is no mention of resorting. The option to resort documents is an important novel feature of the Applicant's commercial service. Claims 62-65 involve the use of XML tags, which have not been addressed in the office action. Claims 66 and 67 involve identifying responsive records that were printed in a prior search. There is no discussion in Barr or Jones of such identifications or their use in a results display. Claim 71 teaches a novel way of sorting records based on prior user experiences and how often prior users selected the documents from similar searches. Again, there is no hint of this method in Barr or Jones. Claims 74 and 75 involve identifying records that were responsive to a prior database query. This would provide the user some very novel and

² Claims 31-33 have been cancelled and are not addressed here.

useful information about what she has already looked at during prior research. Again, there is no discussion of any prior art relevant to these claims.

Finally, claims 54 and 55 involve identifying a most relevant paragraph of a record and choosing said paragraph as the content element to display. The Examiner cites figures 5, 5A, and 5B and col. 23, line 10 through col. 24, line 55 of Barr as relevant to these claims. Barr does indeed discuss how to conduct a natural language search and how to compute the relevance of a document as a whole in col. 23, line 10 through col. 24, line 55. However, determining a most relevant paragraph of a document, regardless of the document's relevance, and using that paragraph in a display to help the user determine whether the document is interesting, as is claimed in claims 54 and 55, is quite novel and not anticipated by Barr. Similarly, figs. 5, 5A, and 5B show preferred data structures and data storage formats, but do not represent ways of determining and displaying the most relevant paragraph of a document. Col 7, lines 58-63.

Claims 56 and 57 require the display of identifiers and content elements in a specific manner in two panels. The Examiner cites the abstract, figures 2, 3, and 4A, col. 22, lines 10-37, col. 14, lines 29-51, and col. 22, lines 31-44 of Barr. The abstract discusses a search engine that can "send search results information representative of the documents." Figures 2 and 3 outline the method of the information retrieval system, but do not indicate how results should be displayed. Fig. 4A shows a display of search results containing identifiers, but there are no content elements shown. Col. 22, lines 10-44 discuss how the user can run a search, how the resulting documents are ordered by relevance, and that the display of the results includes a relevance score, bibliographic information, readability information, size information, and a file type indicator. Noticeably absent from the list is any display of a content element. The passage also discusses how a user can select a document from the results display for retrieval, but there is

no discussion of a display of results identifiers along with content elements. There is again no simultaneous display in any number of windows. Finally, col. 14, lines 29-51 describes the display of the search results in fig. 4A. Again, no content element is simultaneously shown.

Jones does indeed teach the simultaneous display of the text of a story in one panel with an image of the page from which the story came in the other panel. However, neither Jones nor Barr teach the element “displaying in a first panel simultaneously the identifier and at least one content element of at least one record.” Jones does not even involve search results and neither teaches the simultaneous display of identifiers and content elements that are central to the claimed invention. With or without panels, the invention requires the simultaneous display of identifiers and at least one content element.

The Applicant also traverses the combining of Barr and Jones for these claims. The Examiner says one would combine Barr with Mike because of Mike’s ability to “simultaneously display a list of items and there content would provide the user with better viewing of the retrieval result and it’s equivalent content.” This may apply to Miiike, but since Jones does not involve retrieval results, it is inapplicable there.

Finally, claims 60 and 61 add the element of resorting. The Applicant cannot find where resorting is mentioned in any of the cited sections, so the claims must be novel and non-obvious.

Applicants respectfully submit that the arguments submitted herein, in conjunction with the claim amendments, overcome or obviate each of the Examiner's objections and rejections and place Claims 1-4, 6-24, 26-30, 34-67, 71, and 74-75 in condition for allowance.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Philip J. Rosenthal', written over a horizontal line.

Philip J. Rosenthal
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DATED: December 8, 2004